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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,870	10/06/2003	Patrick Williams	5150-77600	3836

7590 11/28/2006

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EXAMINER	
CHEUNG, HUBERT G	
ART UNIT	**PAPER NUMBER**
2112	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/679,870	WILLIAMS ET AL.	
	Examiner	Art Unit	
	Hubert Cheung	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *6 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *19 January 2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to application 10/679,870 filed on 6 October 2003. Claims 1-30 are pending.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 19 January 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

3. The abstract is objected because it is more than 150 words in length (i.e., 158 words). Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

The specification is objected to because of the following informalities:

- Page 16, line 2, recites, "plugged in to an I/O," should be corrected to recite, "plugged into an I/O."

5. The use of the trademarks Visual C++ , Visual Basic, JAVA, LabVIEW, DasyLab, DiaDem, Matrixx, SystemBuild, SimuLink, WiT, Sanscript, ObjectBench, HyperSignal, Pentium, PowerPC, SPARC, LabWindows, CVI and Delphi has been noted in this application (i.e., page 3, line 10). They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

6. Claim 3 is objected to because of the following informalities: at line 3, "on a configuration of a computer" should read as "on the configuration of the computer." Appropriate correction is required.

7. Claim 14 is objected to because of the following informalities: at line 3, "selecting a parameter" should read as "selecting the parameter." Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-23 and 26-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 1 recites the limitation a "plurality of possible parameter values." A "possible" parameter value is indefinite. The parameter value could be present or it may not be present. This language is indefinite which makes the claim indefinite. Appropriate correction is required.

11. Claims 2-23, 29 and 30, which depend on claim 1, are similarly rejected.

12. Claims 2-13, 22, 23 and 26-29 are rejected under the same reasons set forth in the rejection of claim 1 above. Appropriate correction is required.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 1-25, 28-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 is rejected because the claimed invention is directed to non-statutory subject matter. Specifically, the "carrier medium," in accordance with applicant's specification, may be an electrical, electromagnetic or digital signal (i.e., page 9, line 2). This subject matter is not limited to what falls within a statutory category of invention because it is not limited to a process, machine, manufacture or composition of matter. Instead, the present invention includes a form of energy. Energy is not a statutory category because it clearly is not a series of steps or acts that constitute a process, a

mechanical device or a combination of mechanical devices that constitute a machine, a tangible, physical article or object that is some form of matter to be a product and that constitutes a manufacture, or a composition of two or more substances that constitutes a composition of matter.

Claims 2-23, 29 and 30, which depend on claim 1, are similarly rejected.

Claim 24 is rejected because the claimed invention is directed to non-statutory subject matter. Specifically, the "carrier medium," in accordance with applicant's specification, may be an electrical, electromagnetic or digital signal (i.e., page 9, line 2). This subject matter is not limited to what falls within a statutory category of invention because it is not limited to a process, machine, manufacture or composition of matter. Instead, the present invention includes a form of energy. Energy is not a statutory category because it clearly is not a series of steps or acts that constitute a process, a mechanical device or a combination of mechanical devices that constitute a machine, a tangible, physical article or object that is some form of matter to be a product and that constitutes a manufacture, or a composition of two or more substances that constitutes a composition of matter.

Claim 25 is rejected because the claimed invention is directed to non-statutory subject matter. Specifically, the "carrier medium," in accordance with applicant's specification, may be an electrical, electromagnetic or digital signal (i.e., page 9, line 2). This subject matter is not limited to what falls within a statutory category of invention because it is not limited to a process, machine, manufacture or composition of matter. Instead, the present invention includes a form of energy. Energy is not a statutory

category because it clearly is not a series of steps or acts that constitute a process, a mechanical device or a combination of mechanical devices that constitute a machine, a tangible, physical article or object that is some form of matter to be a product and that constitutes a manufacture, or a composition of two or more substances that constitutes a composition of matter.

Claim 28 is rejected because the claimed invention is directed to non-statutory subject matter. Specifically, the "medium," in accordance with applicant's specification, includes a "carrier medium" (i.e., page 9, line 12), which may be an electrical, electromagnetic or digital signal (i.e., page 9, line 2). This subject matter is not limited to what falls within a statutory category of invention because it is not limited to a process, machine, manufacture or composition of matter. Instead, the present invention includes a form of energy. Energy is not a statutory category because it clearly is not a series of steps or acts that constitute a process, a mechanical device or a combination of mechanical devices that constitute a machine, a tangible, physical article or object that is some form of matter to be a product and that constitutes a manufacture, or a composition of two or more substances that constitutes a composition of matter.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

16. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Molinari, et al., US 2003/0058280 A1 (hereinafter "Molinari").

For claim 1, Molinari teaches:

A carrier medium (see paragraph [0083] where [c]omputer (12) comprises generally the internal components . . . that are typical of personal computers, including besides the CPU a main memory) comprising program instructions executable to:

dynamically determine a plurality of possible parameter values (see paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel);

display a graphical user interface for selecting a parameter value, wherein the graphical user interface visually indicates the plurality of possible parameter values (see paragraph [0089] where simply by clicking open the property page of the data sink "panel" placed on the desktop by the user[ ], the data sink presents to the user a detailed listing of available data sources; for any said data source selected by the user, said property page then displays a tree view of only those data channels);

receive user input to the graphical user interface to select a first parameter value from the plurality of possible parameter values (see paragraph [0089] where [u]pon selection of a desired data channel by the user); and

automatically include the first parameter value in source code of a software program in response to the user input selecting the first parameter value (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]).

For claim 2, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values comprises **dynamically determining the plurality of possible parameter values based on a configuration of a computer system** (see paragraph [0089] where when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel).

For claim 3, Molinari teaches:

The carrier medium of claim 2, wherein said dynamically determining the plurality of possible parameter values based on a configuration of a computer system comprises **dynamically determining the plurality of possible parameter values based on a hardware configuration of the computer system** (see paragraph [0089] when

queried by the user . . . the data sink presents to the user a detailed listing of available data sources; paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel; paragraph [0180] where the listing of data source types that are, or are to be, connected to the computer [which includes hardware] . . . and that are supported by appropriated device driver software [which inherently means there is hardware]; and paragraph [0283] where listed data source types represent all of the various data source types then supported by the software of the invention, and thus usable to connect to a corresponding physical device).

For claim 4, Molinari teaches:

The carrier medium of claim 3, wherein said dynamically determining the plurality of possible parameter values based on the hardware configuration of the computer system comprises **programmatically examining information regarding the hardware configuration of the computer system** (see paragraph [0180] where device driver software programmatically examines information regarding hardware; and paragraph [0183] where the DAQ Data Source panel [i.e., software] allows a user to set up conventional DAQ hardware device . . . and to configure the subsystems of said DAQ device).

For claim 5, Molinari teaches:

The carrier medium of claim 3, wherein said dynamically determining the plurality of possible parameter values based on the hardware configuration of the computer system comprises **programmatically querying software associated with one or more hardware devices coupled to the computer system** (see paragraph [0180] where device driver software programmatically examines information regarding hardware; paragraph [0183] where the DAQ Data Source panel [i.e., software] allows a user to set up conventional DAQ hardware device . . . and to configure the subsystems of said DAQ device; and paragraph [0283] where listed data source types represent all of the various data source types then supported by the software of the invention, and thus usable to connect to a corresponding physical device).

For claim 6, Molinari teaches:

The carrier medium of claim 2, wherein said dynamically determining the plurality of possible parameter values based on the configuration of the computer system comprises **dynamically determining a first plurality of possible parameter values** (see paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel);

wherein the program instructions are executable to dynamically determine a second plurality of possible parameter values based on the configuration of the

computer system after the configuration of the computer system has been changed (see paragraph [0266] where once a data source device has been selected, a listing of subsystems associated with said device is presented to the user; and paragraph [0291] where [u]pon selecting a particular data source input channel, . . ., the user is provided by the property page of the data source panel with numerous configuration options. . . . The ranges of parameter values presented to the user are set to limits established by the operating specification of the pertinent hardware device).

For claim 7, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values comprises **dynamically determining one or more parameter values corresponding to hardware devices coupled to a computer system** (see paragraph [0291] where [u]pon selecting a particular data source input channel, . . ., the user is provided by the property page of the data source panel with numerous configuration options. . . . The ranges of parameter values presented to the user are set to limits established by the operating specification of the pertinent hardware device);

wherein the first parameter value corresponds to a first hardware device (see paragraph [0082] where one of the instruments coupled to computer (12), where an instrument is a hardware device; paragraph [0275] where the data acquisition hardware device is a DAQ board; and Fig. 2 (16) where a serial instrument is a hardware device);

wherein said automatically including the first parameter value in source code of the software program comprises automatically configuring source code of the software program with a reference to the first hardware device (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" [i.e., first hardware device] on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]).

For claim 8, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values comprises **dynamically determining one or more parameter values corresponding to resources of one or more hardware devices** (see paragraph [0291] where [u]pon selecting a particular data source input channel, . . ., the user is provided by the property page of the data source panel with numerous configuration options. . . . The ranges of parameter values presented to the user are set to limits established by the operating specification of the pertinent hardware device);

wherein the first parameter value corresponds to a first resource of a first hardware device (see paragraph [0275] where the DAQ Controller property page includes a Data Sources drop-down list . . [t]he user's selection of a data source device on this drop-down list effects a connection between said data source device and the DAQ Controller panel);

wherein said automatically including the first parameter value in source code of the software program comprises automatically configuring source code of the software program with a reference to the first resource of the first hardware device (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" [i.e., first resource of the first hardware device] on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]).

For claim 9, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values comprises **dynamically determining** (see paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel) **one or more GPIB resources** (see paragraph [0082] where Molinari teaches using DAQ resources, which are used in test equipment, through an I/O slot in a computer by using a PCI bus, ISA bus or an EISA bus. Molinari also teaches providing users with a system that is specifically adapted for the development of customized measurement environments for automated test equipment (see paragraphs [0073]-[0074]). These implications disclose, "one or more GPIB resources.");

wherein the first parameter value comprises a first GPIB resource (see paragraph [0082] where Molinari teaches using DAQ resources, which are used in test equipment, through an I/O slot in a computer by using a PCI bus, ISA bus or an EISA bus. Molinari also teaches providing users with a system that is specifically adapted for the development of customized measurement environments for automated test equipment (see paragraphs [0073]-[0074]). These implications disclose, "wherein the first parameter value comprises a first GPIB resource.");

wherein said automatically including the first parameter value in source code of the software program comprises automatically configuring source code of the software program with a reference to the first GPIB resource (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]).

For claim 10, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values comprises **dynamically determining** (see paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel) **one or**

more Visa resources (see paragraph [0082] where Molinari teaches using DAQ resources, which are used in test equipment, through an I/O slot in a computer by using a PCI bus, ISA bus or an EISA bus. Molinari also teaches providing users with a graphical system that is specifically adapted for the development of customized measurement environments for automated test equipment (see paragraph [0073]-[0074]). These implications disclose, "one or more Visa resources.");

wherein the first parameter value comprises a first Visa resource (see paragraph [0082] where Molinari teaches using DAQ resources, which are used in test equipment, through an I/O slot in a computer by using a PCI bus, ISA bus or an EISA bus. Molinari also teaches providing users with a graphical system that is specifically adapted for the development of customized measurement environments for automated test equipment (see paragraph [0073]-[0074]). These implications disclose, "wherein the first parameter value comprises a first Visa resource.");

wherein said automatically including the first parameter value in source code of the software program comprises automatically configuring source code of the software program with a reference to the first Visa resource (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]).

For claim 11, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values comprises **dynamically determining one or more DAQ resources** (see paragraph [0291] where [u]pon selecting a particular data source input channel, . . ., the user is provided by the property page of the data source panel with numerous configuration options. . . . The ranges of parameter values presented to the user are set to limits established by the operating specification of the pertinent hardware device [which can include a DAQ resource]);

wherein the first parameter value comprises a first DAQ resource (see paragraph [0183] where [t]he DAQ Data Source panel allows a user to set up a conventional DAQ hardware device);

wherein said automatically including the first parameter value in source code of the software program comprises automatically configuring source code of the software program with a reference to the first DAQ resource (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" [i.e., first DAQ resource] on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]).

For claim 12, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values comprises **dynamically determining one or more**

universal resource locators (URLs) (see paragraph [0082] where a data source can be obtained from another computer (20) acting as an OPC server. The OPC server can communicate with computer (12) via a wired or wireless means [i.e., network]. In order for computer (12) to communicate with computer (20), computer (12) would inherently have to dynamically determine computer (20)'s IP address. A URL is simply a pneumonic for an IP address. Therefore, the invention must inherently be able to dynamically determine one or more IP addresses, which could be URLs);

wherein the first parameter value comprises a first URL (see paragraph [0082] where a data source can be obtained from another computer (20) acting as an OPC server. The OPC server can communicate with computer (12) via a wired or wireless means [i.e., network]. In order for computer (12) to communicate with computer (20), computer (12) would inherently have to dynamically determine computer (20)'s IP address. A URL is simply a pneumonic for an IP address. Therefore, the invention must inherently be able to have the first parameter value comprise a first URL to reach the data source on computer (20));

wherein said automatically including the first parameter value in source code of the software program comprises automatically configuring source code of the software program with a reference to the first URL (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" [i.e., first URL] on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]).

For claim 13, Molinari teaches:

The carrier medium of claim 1, further comprising program instructions executable to:

receive user input specifying filtering criteria for the parameter values (see paragraph [0149] where [d]ata sources that fit the needs of data sink (130) are checked, and the resulting list of qualifying data sources is displayed, on a combo box, ... Upon the selection of a data source by the user; and Fig. 10);

wherein the graphical user interface visually indicates only a subset of the possible parameter values, wherein the subset is determined based on the specified filtering criteria (see paragraph [0266] where once a data source device has been selected, a listing of subsystems associated with said device is presented to the user; and paragraph [0291] where [u]pon selecting a particular data source input channel . . . the user is provided by the property page of the data source panel with numerous configuration options. . . . The ranges of parameter values presented to the user are set to limits established by the operating specification of the pertinent hardware device; and Fig. 10).

For claim 14, Molinari teaches:

The carrier medium of claim 1, further comprising program instructions executable to:

receive user input requesting to display the graphical user interface for selecting a parameter value (see paragraph [0149] where [a] list of panels having a data source aspect is returned, and an aspect filter (135) of data sink aspect (130) determines, for each data source found, whether the data source accords with the needs of said data sink aspect . . . . Data sources that fit the needs of data sink (130) are checked, and the resulting list of qualifying data sources is displayed, on a combo box, in a "data sources view" of the data sink property page; and paragraph [0266] where once a data source device has been selected, a listing of subsystems associated with said device is presented to the user);

wherein said displaying the graphical user interface is performed in response to the user input requesting to display the graphical user interface (see paragraph [0266] where once a data source device has been selected, a listing of subsystems associated with said device is presented to the user).

For claim 15, Molinari teaches:

The carrier medium of claim 1, wherein said automatically including the first parameter value in source code of the software program comprises automatically including the first parameter value in one of:

a function call in source code of the software program (see paragraph [0038] where the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program [i.e., source code]. At the same time, this AIL file corresponds to an

executable set of selections from existing libraries of executable code [which inherently includes a function call in the source code]); or

a method call in source code of the software program (see paragraph [0038] where the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program [i.e., source code]. At the same time, this AIL file corresponds to an executable set of selections from existing libraries of executable code [which inherently includes a method call in the source code]).

For claim 16, Molinari teaches:

The carrier medium of claim 1, wherein the software program comprises **a graphical program** (see paragraph [0170] where the user interface should preferably comprise a toolbox of conventional graphical application tools, including graphical means to perform editing and manipulation functions such as cut, copy, save, delete, undelete and the like, ... Additional conventional tools appropriate to any graphical software development application are also preferably provided, including "load project," ["]save project", "save project as", and a "project information" property page);

wherein said automatically including the first parameter value in source code of the software program comprises automatically including the first parameter value in graphical source code of the graphical program (see paragraph [0032] where the execution of the developed application may therefore be implemented, with no compilation or interpretation of code, by the execution of a simple textual script

file [i.e., source code] identifying the selected attributes, functions and connectivities determined by the users application).

For claim 17, Molinari teaches:

The carrier medium of claim 16, wherein said automatically including the first parameter value in graphical source code of the graphical program comprises **automatically configuring a node in the graphical program with the first parameter value** (see paragraph [0037] where [t]he user in the course of programming a measurement application is guided in the selection and the definition of instrument component panels, each of which represents a software "aspect" [i.e., node] having attributes necessary for the user's intended application. As the user places selected virtual instruments "panels" on the desktop and configures their properties . . ., an AIL file [i.e., source code] containing a description of the selected, created and defined aspects is simultaneously being created).

For claim 18, Molinari teaches:

The carrier medium of claim 17, wherein said automatically configuring the node in the graphical program with the first parameter value comprises **automatically connecting the first parameter value to the node** (see paragraph [0037] where [t]he user in the course of programming a measurement application is guided in the selection and the definition of instrument component panels, each of which represents a software "aspect" [i.e., node] having attributes necessary for the user's intended application. As

the user places selected virtual instruments "panels" on the desktop and configures their properties . . ., an AIL file [i.e., source code] containing a description of the selected, created and defined aspects is simultaneously being created [i.e., automatically connecting the first parameter value to the node]).

For claim 19, Molinari teaches:

The carrier medium of claim 17, wherein said automatically configuring the node in the graphical program with the first parameter value comprises **automatically configuring the node to utilize the first parameter value** (see paragraph [0037] where [t]he user in the course of programming a measurement application is guided in the selection and the definition of instrument component panels, each of which represents a software "aspect" [i.e., node] having attributes necessary for the user's intended application. As the user places selected virtual instruments "panels" on the desktop and configures their properties . . ., an AIL file [i.e., source code] containing a description of the selected, created and defined aspects is simultaneously being created [i.e., automatically configuring the node to utilize the first parameter value]).

For claim 20, Molinari teaches:

The carrier medium of claim 1, wherein said displaying the graphical user interface comprises **displaying the graphical user interface in a separate window apart from the software program** (see paragraph [0025] where [b]y the selections from menu lists, or the "drag and drop" of selected panels icons presented in a "flying

tool windows" [which is apart from the main desktop and which is also a part of the graphical user interface of the software program]).

For claim 21, Molinari teaches:

The carrier medium of claim 1, wherein said displaying the graphical user interface comprises **displaying the graphical user interface in a portion of a program window for the soil-ware program** (see Fig. 1; Fig. 16; and Fig. 17).

For claim 22, Molinari teaches:

The carrier medium of claim 1, **wherein the graphical user interface displays the plurality of possible parameter values as a list** (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources; for any said data source selected by the user, said property page then displays a tree view of only those data channels that are supported for display by the data sink panel; Fig. 11; Fig. 13; and Fig. 15);

wherein said receiving user input to the graphical user interface to select the first parameter value comprises receiving user input to the graphical user interface to select the first parameter value from the list (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources; for any said data source selected by the user, .

. . . Upon selection of a desired data channel by the user, the data sink aspect contains the functionality required to establish automatically a data link between the data source and the data sink).

For claim 23, Molinari teaches:

The carrier medium of claim 1, wherein said dynamically determining the plurality of possible parameter values includes **dynamically determining one or more property values** (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources; for any said data source selected by the user, said property page then displays a tree view of only those data channels that are supported for display by the data sink panel; and paragraph [0149] where [a] list of panels having a data source aspect is returned, and an aspect filter (135) of data sink aspect (130) determines, for each data source found [i.e., dynamically determining a property], whether the data source accords with the needs of said data sink aspect . . . . Data sources that fit the needs of data sink (130) are checked, and the resulting list of qualifying data sources is displayed [i.e., dynamically determining another property]);

wherein said receiving user input to the graphical user interface to select the first parameter value comprises receiving user input to the graphical user interface to select a first property value (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on

the desktop by the user), the data sink presents to the user a detailed listing of available data sources);

wherein the first property value is automatically included in the software program in response to the user input selecting the first property value (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]; and paragraph [0099] where [t]he actions of the user in selecting instrument component panels, and configuring their properties, serve to define the content and properties of the user's intended application program. These actions by the user also operate to create a textual file, called in this description an Aspect Interaction Language (AIL) file, that contains a description of the selected, created and defined software "aspects", ... As the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program).

For claim 24, Molinari teaches:

A carrier medium comprising program instructions executable to:

determine a plurality of parameter values based on a hardware configuration of a computer system (see paragraph [0291] where [t]he ranges of

parameter values presented to the user are set to limits established by the operating specifications of the pertinent hardware device);

display a graphical user interface for selecting a parameter value, wherein the graphical user interface visually indicates the plurality of parameter values (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources [i.e., graphical user interface]);

receive user input to the graphical user interface to select a first parameter value from the plurality of parameter values (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources); and

automatically include the first parameter value in source code of a software program in response to the user input selecting the first parameter value (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]; and paragraph [0099] where [t]he actions of the user in selecting instrument component panels, and configuring their properties, serve to define the content and properties of the user's intended application program. These actions by the user also operate to

create a textual file, called in this description an Aspect Interaction Language (AIL) file, that contains a description of the selected, created and defined software "aspects", ... As the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program).

For claim 25, Molinari teaches:

A carrier medium comprising program instructions executable to:

determine a plurality of resources of one or more measurement devices coupled to a computer system (see paragraph [0082] where [t]he system (10) comprises a computer (12), which is connectable to a plurality of instruments [i.e., measurement devices]); paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel);

display a graphical user interface visually indicating a plurality of parameter values, wherein each parameter value corresponds to one of the resources (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources [i.e., graphical user interface]);

receive user input to the graphical user interface to select a first parameter value from the plurality of parameter values (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources); and

automatically include the first parameter value in source code of a software program in response to the user input selecting the first parameter value (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]; and paragraph [0099] where [t]he actions of the user in selecting instrument component panels, and configuring their properties, serve to define the content and properties of the user's intended application program. These actions by the user also operate to create a textual file, called in this description an Aspect Interaction Language (AIL) file, that contains a description of the selected, created and defined software "aspects", ... As the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program).

For claim 26, Molinari teaches:

A system comprising:

a processor (see paragraph [0083] where [a]ccordingly computer (12) includes at least one central processing unit, or CPU . . . .);

a memory coupled to the processor, wherein the memory stores program instructions (see paragraph [0083] where [c]omputer (12) comprises generally the internal components . . . that are typical of personal computers, including besides the CPU a main memory);

wherein the processor is operable to execute the program instructions stored in the memory to:

dynamically determine a plurality of possible parameter values (see paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel);

display a graphical user interface for selecting a parameter value, wherein the graphical user interface visually indicates the plurality of possible parameter values (see paragraph [0089] where simply by clicking open the property page of the data sink "panel" placed on the desktop by the user[ ], the data sink presents to the user a detailed listing of available data sources; for any said data source selected by the user, said property page then displays a tree view of only those data channels);

receive user input to the graphical user interface to select a first parameter value from the plurality of possible parameter values (see paragraph [0089] where

[w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources); and

automatically include the first parameter value in source code of a software program in response to the user input selecting the first parameter value (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]; and paragraph [0099] where [t]he actions of the user in selecting instrument component panels, and configuring their properties, serve to define the content and properties of the user's intended application program. These actions by the user also operate to create a textual file, called in this description an Aspect Interaction Language (AIL) file, that contains a description of the selected, created and defined software "aspects", ... As the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program).

For claim 27, Molinari teaches:

A method for modifying source code of a software program, the method comprising:

dynamically determining a plurality of possible parameter values (see paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel);

displaying a graphical user interface for selecting a parameter value, wherein the graphical user interface visually indicates the plurality of possible parameter values (see paragraph [0089] where simply by clicking open the property page of the data sink "panel" placed on the desktop by the user[ ], the data sink presents to the user a detailed listing of available data sources; for any said data source selected by the user, said property page then displays a tree view of only those data channels);

receiving user input to the graphical user interface to select a first parameter value from the plurality of possible parameter values (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources); and

automatically including the first parameter value in source code of the software program in response to the user input selecting the first parameter value (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of

the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]; and paragraph [0099] where [t]he actions of the user in selecting instrument component panels, and configuring their properties, serve to define the content and properties of the user's intended application program. These actions by the user also operate to create a textual file, called in this description an Aspect Interaction Language (AIL) file, that contains a description of the selected, created and defined software "aspects", ... As the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program).

For claim 28, Molinari teaches:

A medium (see paragraph [0083] where [c]omputer (12) comprises generally the internal components . . . that are typical of personal computers, including besides the CPU a main memory [i.e., medium]) configured to:

dynamically determine a plurality of possible parameter values (see paragraph [0089] when queried by the user . . . the data sink presents to the user a detailed listing of available data sources; and paragraph [0148] where [u]pon the opening of the property page by the user, said property page handler browses front panel Aspect Handler . . . for any data source panels then existing within the front panel);

display a graphical user interface for selecting a parameter value, wherein the graphical user interface visually indicates the plurality of possible parameter values (see paragraph [0089] where simply by clicking open the property page of the data sink "panel" placed on the desktop by the user[ ], the data sink presents to the user a detailed listing of available data sources; for any said data source selected by the user, said property page then displays a tree view of only those data channels);

receive user input to the graphical user interface to select a first parameter value from the plurality of possible parameter values (see paragraph [0089] where [w]hen queried by the user (simply by clicking open the property page of the data sink "panel" placed on the desktop by the user), the data sink presents to the user a detailed listing of available data sources); and

automatically include the first parameter value in source code of a software program in response to the user input selecting the first parameter value (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]; and paragraph [0099] where [t]he actions of the user in selecting instrument component panels, and configuring their properties, serve to define the content and properties of the user's intended application program. These actions by the user also operate to create a textual file, called in this description an Aspect Interaction Language (AIL) file, that contains a description of the selected, created and defined software "aspects", ...

As the user adds more panels, selects more properties, and effects connections between panels, the AIL file expands into a complete textual description of the user's program).

For claim 29, Molinari teaches:

The carrier medium of claim 1, **wherein said displaying the graphical user interface that visually indicates the plurality of possible parameter values is performed while a user is creating the software program** (see paragraph [0089] [w]hen queried by the user . . . the data sink presents to the user a detailed listing of available data sources);

wherein said automatically including the first parameter value in source code of the software program (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]) **is performed to aid the user in creating the software program** (see paragraph [0019] where [u]sing the tools provided by the invention, a user having essentially no software programming experience is enabled to design and construct a working, problem-specific measurement solution).

For claim 30, Molinari teaches:

The carrier medium of claim 1, wherein the software program comprises a **graphical program** (see paragraph [0318] where a preferred embodiment of the present invention [has] an internal set of "Windows" classes, including the functionality to create a desktop window that sits "on top" of the original Windows operating system; Fig. 1; Fig. 11; Fig. 13; and Figs. 16-25);

wherein said automatically including the first parameter value in source code of the software program (see paragraph [0037] where [a]s the user places selected virtual instrument "panels" on the desktop and configures their properties . . ., an AIL file containing a description of the selected, created and defined aspects is simultaneously created, including, for each aspect, a description of its properties and connections [i.e., source code]) **comprises automatically including the first parameter value in a block diagram of the graphical program** (see Fig. 1 where the blocks are (42), (44) and (46); Fig. 17 where the blocks are (212), (214) and (221); and Fig. 25).

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Gomes, et al., US 2005/0028107 A, Memory e.g. CD-ROM, dynamic RAM stores instructions for setting new value to expression in program to continue program execution;
- Walters, et al., US 6,690,390 B1, Interactive on-line help for completing a task;

- Matheson, US 6,546,433 B1, Method and system for integrating external functions into an application environment;
- Bowman, et al., US 6,233,726 B1, Development system with reference card and parameter wizard methodologies for facilitating creation of software programs;
- Gretta, et al., US 6,076,952 A, Fieldbus network configuration utility with improved parameter control;
- Mitchell, et al., US 5,724,272 A, Method and apparatus for controlling an instrumentation system;
- Mondrik, et al., US 5,771,388 A, System and method for mapping driver level event function calls from a process-based driver level program to a session-based instrumentation control driver level system; and
- Bixler, US 6,507,351 B1, System for managing personal and group networked information.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hubert Cheung whose telephone number is (571) 270-1396. The examiner can normally be reached on M-R 7:30 to 5:00 EST; alternate F 7:30 to 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chameli Das can be reached on (571) 272-3696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Hubert Cheung HC 11/22/06
Date: 21 November 2006